UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,656	12/31/2003	Xianping Ge	0026-0068	2826

44989 7590 08/22/2006	EXAMINER
HARRITY SNYDER, LLP	LIE, ANGELA M

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ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.

10/748,656</td><td>Applicant(s)

GE ET AL.</td></tr>
<tr><td>Examiner

Angela M. Lie</td><td>Art Unit

2163</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 December 2003</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-31</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-31</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>31 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/9/05, 8/18/04, 8/13/04</u>

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 2 is objected to because of the following informalities: disclosing

that there is a set of documents also implies that the corresponding collection

comprises multiple or plural documents, therefore claim 2 fails to further limit

independent claim 1.

2.   Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in
> public use or on sale in this country, more than one year prior to the date of application for patent in
> the United States.

4.   Claims 1-3, 14-26 and 28-31 are rejected under 35 U.S.C. 102(b) as being

anticipated by Heumann (US Publication 2001/0034660).

        As to claims 1, 20, 22 and 27, Heumann discloses a method for ordering

documents (paragraph 15), comprising: receiving a search query (Figure 2,

element 21, paragraph 10); determining a location associated with the query

(Figure 2, element 22); determining topical scores for a plurality of documents

based, at least in part, on the query (paragraphs 12 and 15, i.e. desired product);

selecting a set of documents from the plurality of documents (Figure 2, element

24, paragraph 15, wherein the system retrieves multiple providers associated

with the query) ; determining distance score for each document in the set of

documents using a document location associated with the document and the

location associated with the query (paragraph 15, wherein the result also can be

ranked based on the distance between the provider and the user) ; and ordering

the set of documents as a function of both the topical scores of the set of

documents and the distance scores of the set of documents (Figure 2, element

26 and paragraph 16).

As to claim 2, Heumann discloses a method wherein the set of documents

includes the plurality of documents (paragraph 15, multiple product providers).

As to claim 3, Heumann discloses a method wherein the function depends

on the topical score and the distance score of each document in the set of

documents (Figure 2, steps 24 and 25 and paragraph 13).

As to claim 14, Heumann discloses a method wherein the ordering the set

of documents includes: generating an overall score for each of the documents in

the set of documents based (paragraph 14, since both product and distance

criteria are taken into account when listing result, there has to be some sort of

score allowing to rank the best match on the very top of the resulting list), at least

in part, on the topical score and the distance score, and ordering the set of

documents based, at least in part, in the overall scores (paragraphs 13 and 15).

As to claim 15, Heumann discloses a method wherein the distance score

is based, at least in part, on a location sensitivity (paragraph 14, wherein the

determining minimal distance with the best provider match, is considered to be

equivalent with location sensitivity).

As to claim 16, Heumann discloses a method wherein the location

sensitivity dependens, at least in part on at least one of the keyword, a topic, the

query, the location associated with the query, and a user issuing the query

(Figure 2, step 22, paragraph 14).

As to claim 17, Heumann discloses a method wherein the documents are

web pages (paragraph 19, wherein most up to date prices for searched items

need to be accessed from online source in order to keep them current).

As to claim 18, Heumann discloses a method wherein the documents are

advertisements (paragraph 17).

As to claim 19, Heumann discloses a system for ordering documents

(paragraph 15), comprising: means for determining a location associated with a

query (Figure 2, element 22); means for determining topical scores for a plurality

of documents based, at least in part, on the query (paragraph 13, Figure 2,

element 23); means for identifying one or more documents from the plurality of

documents (paragraph 15, multiple product providers); means for determining a

distance score for each of the identified documents using document locations

associated with the identified documents based, (paragraph 14) at least in part,

on the topical score and the distance score; and means for arranging the

identified documents based, at least in part, on the overall scores (paragraph 14,

figure 2, elements 24 and 25).

As to claim 21, Heumann discloses a server wherein the ranking component is further configured to order the set of documents based, at least in part, on ranking of the set of documents (paragraph 15).

As to claim 23, Heumann discloses a method wherein the determining a location sensitivity of the identified topic includes determining a degree to which location is relevant for the identified topic (paragraph 14, since all the providers carry exact desired product, the shortest distance is selected, if the provider would not carry the wanted item then this selection would not be significant even though the location might be the closest).

As to claim 24, Heumann discloses a method wherein the location sensitivity of the identified topic is determined based, at least in part, on user behavior with regard to prior search (paragraph 15, once search is contacted the user can choose to rank the providers based on the price, so it is based on the prior search (i.e. search already completed)).

As to claim 25, Heumann discloses a method further comprising: determining a geographic range for the identified topic when the identified topic is determined to be location sensitive (paragraph 15, i.e. distance).

As to claim 26, Heumann discloses a method wherein the ranking at least one document in the set of documents is based, at least in part, on the location associated with the at least one document and the geographic range for the identified topic when the identified topic is determined to be location sensitive (paragraphs 14 and 15).

As to claim 29, Heumann discloses the method comprising: ranking the set of potential advertisements based, at least in part, on the comparing; and wherein the ordering the set of potential advertisements includes re-ranking at least some of the set potential advertisements (paragraph 15, last two lines).

As to claim 30, Heumann discloses the method wherein the location associated with the target document is based, at least in part, on a user that accesses the target document (paragraph 14, figure 2, step 22, wherein in order to determine desired or nearest location, the location of the user has to be first determined).

As to claims 28 and 31, Heumann discloses a method and a system comprising: analyzing the target document to identify a topic for the target document (paragraphs 15 and 17, topic could be for instance name of the provider) and a location associated with the target document (paragraph 9); identifying targeting information for a plurality of advertisements (paragraphs 15 and 17, i.e. price), ; comparing the targeting information for plurality of advertisements (paragraph 15, comparing prices); determining a distance score for at least one advertisement in the set of potential advertisements using an advertiser location associated with the one advertisement and the location associated with the target document (paragraph 15); ordering the set of potential advertisements based, at least in part, on the distance score of the at least one advertisement; and presenting at least some of the ordered set of potential advertisements (paragraphs 14 and 15) .

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   Claims 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Heumann (US Publication 2001/0034660) in the view of Berkan et al (US

Publication 200300743353).

        As to claim 4,12 and 13, Heumann teaches all the limitations disclosed in

claim 1, however he does not explicitly teaches the method wherein the topical

score is higher for more relevant ones of the documents and a distance score is

higher for ones of the documents with a document location nearer to the location

associated with the query. Berkan teaches an answer retrival technique wherein

the results are ranked based on the score i.e. the most top result having the

highest scores (paragraphs 42 and 150). It would have been obvious to one of

the ordinary skill in the art during the time the invention was made to rank results

in the descending order, wherein the top position would have the highest score,

as taught by Berkan, because majority of match calculating algorithms lead to

positive result, wherein satisfying each matching criteria increases the overall

matching score. Therefore, if the document matches the query very well, it is

certain to expect that the score would be also high. Once the score is

determined, the resulting documents can be put in order depending on their

matching scores, therefore it would create additional complexity to reverse the

matching scores so as to place the documents in the ascending order. Such an

action based on the additional calculations requirement would slow down the

processing time.

Note regarding claim 12, ranking the results based on the closest distance

(paragraph 14).

Note regarding claim 13, ranking based on the information found in the

result, for instance price (paragraph 14), wherein the lowest price has the highest

score (i.e. is ranked first).

As to claims 5 and 6, Heumann teaches the method wherein determining

distance score for the document includes calculating a distance from the

document location to the location associated with the query (paragraph 14).

Heumann does not explicitly teach however, that the function used for the

calculation of the score is monotonic. Berkan teaches the answer retrieval

technique wherein score calculating function shows the monotonic behavior (Figs

8A-8D). It would have been obvious to one of the ordinary skill in the art during

the time the invention was made to use a monotonic function as taught by

Berkan, in Heumann searching algorithm because this would simplify

calculations (constant polarity) and therefore minimize the processing time.

As to claims 7-11, Heumann teaches all the limitations discloses in claim

1, however he does not explicitly teach document ordering comprising weighting

the topical and distance scores. Berkan teaches the retrieval technique wherein

weightings are used based on the importance or the relevance of the result

(paragraph 41). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use weightings to determine more accurately the relevance of the results, because it is well known and commonl used technique for matching query with the results, in order to find most relevant art or documents.

Note regarding claim 9, if the weights would not vary, there would be no ranking.

Note regarding claim 10, query allows to obtain results, so indirectly weight depends on query/keyword (i.e. weight result, if query results in a lot of well matching documents, overall document weighting will also be higher).

The Prior Art

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-        Ryu (US Patent 6377961) discloses a method for displaying internet search result wherein the method comprises the steps of obtaining the query, specifying location of the query and the searched destination, and combining both the destination score and the document's topic score in order to generate final list of results. This reference does not teach explicitly that all the documents are ranked according to their score.

-        Liechty et al (US Publication 20030078924) discloses a

probabilistic location estimation which applies the score to each

result based on the location and assigned weight for data point or
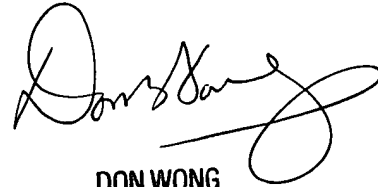
result.

Inquiry

8.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Angela M. Lie whose telephone number is

571-272-8445. The examiner can normally be reached on M-F.

9.   If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

10.   Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

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